

Public Health Reports

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EDITORIAL

With this issue, David M. Ozonoff, MD MPH, joins *Public Health Reports* as the book review editor. Dr. Ozonoff works for the Veterans Administration and is a Professor in and Chair of the Department of Environmental Health at the Boston University School of Public Health. Under David's leadership we will

expand this department of the journal, bringing you insight into public health's major intellectual advances and controversies through reviews by some of the field's leading experts and critics. And of course we will continue to review the books and films that shape the general public's understanding of public health.

PUBLIC HEALTH NEWS & NOTES

Reports Highlight Vaccine Inequities

The percentage of fully immunized 2-year-old children in the United States rose from 55% in 1992 to 75% in 1994 and 1995, according to a report by the Children's Defense Fund. At the same time, the report pointed out, the rate of vaccine-preventable illness among young children dropped by 41% from 1993 to 1995, with seven of eight vaccine-preventable illnesses reaching all-time record lows,

Worldwide, however, more than two million children still die annually from diseases that could have been prevented by vaccination, according to a World Health Organization-United Nations Children's Fund joint report.

Another five to six million children in poor countries die from vaccine-preventable diseases because the vaccines are not available to them, the report added.

Increasing costs and diminishing financial contributions from governments and philanthropies could threaten future efforts to prevent such child killers as diarrhea, respiratory infections, and malaria, for which vaccines are currently being developed, according to the joint report.

The Children's Defense Fund report can be obtained by telephone at 202-662-3551 or by e-mail at <healthaa@childrensdefense.org>. The World Health Organization-United Nations Children's Fund report, State of the World's Vaccines and Immunization, is available from Celinda T. Verano at 212-963-8320.

Medicare Beneficiaries Need New Care Options, Better Protection: IOM

The health care options available to Medicare beneficiaries should be expanded, but only after the Federal Government and private insurers take steps to make all health plans more responsive and understandable to the elderly, according to a committee of the Institute of Medicine (IOM).

Medicare participants are moving into managed care arrangements at an unprecedented pace, especially in California and Florida. Still, 31 states have no significant enrollment in health maintenance organizations among Medicare beneficiaries. Only 10% of the Medicare population is enrolled in managed care, compared with 70% of the non-Medicare population.

Medicare, the single largest payer

in the U.S. health care system, purchases about 19% of all personal health services in the country. The program paid an estimated \$183.8 billion in 1995 to cover 37 million people, 33 million of whom are elderly. The number of Medicare beneficiaries has tripled since the program was initiated in 1967 and is expected to grow by nearly 2% annually through 2019 as the population continues to age.

Many of the 70,000 Medicare beneficiaries who enroll in managed care plans each month lack sufficient information to choose the best plan or to understand their coverage once enrolled, the committee found.

The IOM committee was not asked to determine the potential savings from increasing access to managed care, but it said that broadening choices available to Medicare beneficiaries could increase the likelihood that they would find an economical plan that provides better coverage for them than traditional Medicare.

Legislation proposed in the 104th Congress would have provided new incentives for Medicare recipients to move into managed care, partly propelled by recent reports that the Federal Hospital Insurance Trust Fund will run out of money by the year 2001 unless changes are made. The proposed legislation was not enacted, but the sentiment that Medicare should rely more heavily on managed care is expected to be a major theme of any future reform.

The IOM committee called for the Federal Government to allow only those health care plans that meet the following new requirements to attempt to enroll Medicare beneficiaries:

- plan offers an annual open enrollment season to enable beneficiaries to compare more easily the true value of all options with each other and with their current insurance;
- guaranteed renewal of coverage

with no exemptions for people with pre-existing health problems;

- provision of information that is specified by the Federal Government to assure informed choice; and
- meeting quality certification requirements comparable to those already developed by national private accreditation organizations.

Health plan guidelines about how to enroll, disenroll, and file for appeals or grievances should reflect beneficiaries' lack of understanding of traditional Medicare and Medigap insurance, the report says.

The IOM committee study was funded by the Robert Wood Johnson Foundation, the Commonwealth Fund, the Kansas Health Foundation, and the Pew Charitable Trusts.

Copies of the committee's report, Improving the Medicare Market: Adding Choice and Protections, are available from the National Academy Press, 2101 Constitution Ave. NW, Washington DC 20418; tel. 202-334-3313 or 800-624-6242. The cost of the report is \$45 prepaid plus shipping charges of \$4 for the first copy and 50 cents for each additional copy.

Federal Guidelines Needed to Ensure Safety in Animal-Human Transplants

So far, all efforts to prolong human life through animal organ transplants have met with failure, either because of organ rejection or dysfunction or because the immunosuppressive drugs used to prevent rejection led to infection.

Animal organs and tissue are commonly used, however, to treat certain human illnesses. Pig heart valves are used routinely in cardiac surgery, for instance, and insulin from cattle is used to treat diabetes. Additional research is underway to assess the viability of ani-

mal tissue transplantation for treating AIDS and Parkinson's disease.

Despite its promise, animal-to-human, or "xenographic," transplantation may pose health risks and ethical questions that go far beyond those involved in transplants of human organs, according to a new Institute of Medicine (IOM) report. For example, infectious agents transferred to a patient along with new organs or tissues could pose a public health risk by introducing diseases to which humans are not resistant.

The IOM report recommends that all researchers and institutions experimenting with such transplants adhere to such guidelines as those currently being developed by the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC). These guidelines should be enforced by local institutional review boards and animal care committees, according to the report.

The IOM committee commended the FDA-CDC effort and suggested the creation of an advisory body within the Department of Health and Human Services to coordinate development, oversight, and evaluation of guidelines among Federal agencies and other institutions involved in human clinical trials.

The advisory entity could be charged "to coordinate, but not to regulate, research, policy, and surveillance issues related to xenotransplantation" and to suggest modifications to guidelines based on evidence from research and clinical trials, IOM said. Researchers, ethicists, lawyers, and representatives of patient groups and the public would constitute the advisory committee membership.

To guard against potential animal-to-human infection, the IOM committee recommended that guidelines for human clinical trials address these four major areas:

- Procedures to screen source animals for the presence of infectious organisms and consideration of the development of specific pathogen-free animals.

- Continued surveillance of patients and periodic surveillance of their families and health care workers to check for evidence of infectious diseases.
- Establishment of tissue banks containing tissue and blood samples from source animals and patients.
- Establishment of national and local registries of patients receiving xenotransplants and a special effort to coordinate with international registries and databases.

The committee also explored the feasibility of establishing colonies of animals born and raised in germ-free conditions. Although it is not possible to produce a completely uncontaminated animal, it is possible to produce an animal certified to be free of specific pathogens.

Because of their genetic closeness to humans, nonhuman primates may be more likely to transmit infectious organisms than more distant species such as pigs, the report says. Establishing a dedicated swine colony would be easier and cheaper than creating a comparable colony of baboons, for example, because pigs have a shorter reproductive cycle.

In addition to calling for continued research to gain a better understanding of xenotransplantation, the report also recommends further investigation into the special ethical issues raised by this technology. For example, how do patients grant informed consent when the potential harm extends beyond one person to affect the public health?

Further, how do researchers ensure that access to xenotransplant procedures is provided to those who need it most, regardless of their ability to pay? Lifetime surveillance and the psychological and social effects of receiving animal organs also pose ethical questions unique to xenotransplantation. Issues related to the appropriate use and care of animals also are relevant.

The IOM study was funded by the Greenwall Foundation, Howard Hughes Medical Institute, National

Institute of Diabetes and Digestive and Kidney Diseases, National Heart, Lung, and Blood Institute, National Cancer Institute, National Institute of Allergy and Infectious Diseases, Food and Drug Administration, Centers for Disease Control and Prevention, Health Resources and Services Administration, U.S. Navy, Charles River Laboratories, and W.R. Grace and Company-Connecticut.

Copies of the committee report, Xenotransplantation: Science, Ethics, and Public Policy, are available from the National Academy Press, 2101 Constitution Ave. NW, Washington DC 20418; tel. 202-334-3313 or 800-624-6242. The cost of the report is \$29 prepaid plus shipping charges of \$4 for the first copy and 50 cents for each additional copy.

NIH Funds Four Oral Cancer Research Centers

The National Institute of Dental Research (NIDR) and the National Cancer Institute (NCI) have stepped up the battle against oral cancer by funding research centers that will investigate how oral cancer is triggered and what can be done to reduce its effects.

Grants totalling \$2.8 million for this year, which will provide additional funds over a five-year period, were awarded to the University of Alabama at Birmingham; the University of California, San Francisco; the University of Chicago and Northwestern University; and the M.D. Anderson Cancer Center at the University of Texas.

The need for the centers is underscored by the fact that survival rates for oral cancer have not improved significantly over the past 30 years. Oral cancer claims the life of one American every hour. An estimated 30,000 are diagnosed with oral or pharyngeal cancer annually; only half survive more than five years.

Oral cancer usually occurs in people older than age 40 but can develop at any age. It is twice as common in

men as in women, and occurs more frequently in African Americans than in whites.

The major risk factors for oral cancer are tobacco and alcohol use and—in the case of lip cancer—prolonged exposure to sunlight.

Both NIDR and NCI are component parts of the National Institutes of Health (NIH).

Mail-Order Meals to Market

The Campbell Soup Company is test-marketing a mail-order frozen meal program directed at the 60 million Americans who have high blood pressure, high blood cholesterol, or high blood sugar. The new program is being test-marketed in the state of Ohio.

The new product line, known as Intelligent Quisine, will be delivered to customers' homes by United Parcel Service in containers designed to keep food frozen for 48 hours, at a cost of \$79.95 a week for 21 meals.

Although other food companies sell low-fat or low-sodium frozen dinners in supermarkets and by mail, this is the first such complete meal program to make claims—based on clinical trials of some 898 patients—about reducing high cholesterol, high blood pressure, and high blood sugar levels in people diagnosed with these conditions, according to the company.

The meal program was developed in consultation with the American Heart Association and the American Diabetes Association.

AHCPR Guideline Urges Prompt Assessment of Alzheimer's Disease

A clinical practice guideline of the Public Health Service's Agency for Health Care Policy and Research (AHCPR) stresses that significant mental impairment is not a part of normal aging and should be a signal for action.

Despite their prevalence, Alz-

heimer's disease and related dementias often go unrecognized or misdiagnosed in their early stages. Many health care professionals as well as patients, their families, and friends mistakenly view the early symptoms of Alzheimer's disease as inevitable consequences of aging.

Symptoms that should trigger an assessment by a health care professional include increased difficulty with learning and retaining new information, with handling complex tasks, with reasoning, and with spatial ability and orientation. A family history of dementia or Down syndrome, or both, are possible risk factors that merit special attention.

An overview for clinicians and consumers of the Alzheimer's clinical practice guideline and the consumer publication, Early Alzheimer's Disease: A Guide for Patients and Families, are available free of charge from the AHCPR Publications Clearinghouse, P.O. Box 8547, Silver Spring MD 20907-8547; tel. 800-358-9295; InstantFax 301-594-2800; home page www.ahcpr.gov.

Child Abuse Doubles; Investigation Lags

While child abuse and neglect nearly doubled in the United States between 1986 and 1993, the percentage of cases investigated during that period declined dramatically, according to a survey released by Health and Human Services Secretary Donna Shalala last fall.

Shalala, who termed the situation "shameful and startling," also announced \$23 million in new grants for child abuse prevention programs.

According to the survey, conducted as part of the National Incidence Study and funded by the National Center on Child Abuse and Neglect, between 1986 and 1993, the number of abused and neglected chil-

dren grew from approximately 1.4 million to more than 2.8 million nationwide.

The number of children who were seriously injured by abuse or neglect during that period quadrupled from about 143,000 to nearly 570,000.

Despite the increased incidence of abuse and neglect, the number of investigations remained constant between 1986 and 1993. As a result, the percentage of cases investigated declined from 44% to 28%.

Other findings included

- Children of single parents had an 87% higher risk of being harmed by physical neglect and an 80% higher risk of suffering serious injury or harm from abuse and neglect than other children.
- Children from families with annual incomes below \$15,000 were more than 22 times more likely to experience maltreatment than children from families whose incomes exceeded \$30,000. They were also 18 times more likely to be sexually abused, almost 56 times more likely to be educationally neglected, and more than 22 times more likely to be seriously injured.
- Girls are sexually abused three times more often than boys, while boys are at greater risk of emotional neglect and serious injury than girls.
- There were no significant race-ethnicity differences in the incidence of maltreatment.

The survey was designed to estimate the actual number of abused and neglected children in the United States, including cases not reported to child protective services. It relied not only on official reports of abuse and neglect but also on information from 5600 community professionals who come into contact with maltreated children in a variety of settings.

Calling on states to improve their performance in protecting children, in addition to the prevention grants for community-based family services in all

50 states, Shalala announced \$2.5 million in increased resources for state public health agencies to ensure that maternal and child health programs be expanded to include child protection, family preservation, and family support.

Calls for More Nuclear Waste Sites Exaggerated, MDs Say

The problem of disposing of low-level radioactive medical waste is "far more tractable" than has previously been believed and the urgency to develop new nuclear waste sites has been "exaggerated," according to a recent report by the New York City Chapter of Physicians for Social Responsibility.

The study, *An Assessment of "Low-Level" Radioactive Waste Options for Hospitals and Biomedical Research Institutions in New York*, is based on telephone and in-person interviews with radiation safety officers, physicians, and hospital administrators as well as statistical data on some 43 New York State institutions.

The authors argue against the contentions of nuclear industry lobbyists and others that without additional nuclear waste sites, medical research, diagnosis, and treatment would be halted. They favor, instead, the use of a variety of new medical and waste management techniques.

The report may be ordered for \$7 from the New York City chapter of Physicians for Social Responsibility, 475 Riverside Drive, Room 551, New York NY 10115.

Adolescent Substance Abuse Tied to Family Structure

Adolescents living with two biological or adoptive parents are significantly less likely to use illicit drugs, alcohol, or cigarettes or to report problems associated with use than are ado-

lescents in other family structures, according to a recent study conducted by the Substance Abuse and Mental Health Services Administration of the Public Health Service.

The role of family structure is not diminished when the effects of gender, age, family income, and race-ethnicity are statistically controlled in the analysis, according to the study, which was based on data from approximately 22,000 respondents ages 12–17 in the combined 1991, 1992, and 1993 National Household Surveys on Drug Abuse, a much larger sample than any analyzed in previous studies.

Adolescents not living with two biological or adoptive parents were from 50% to 150% more likely to use substances, to be dependent on substances, or to need treatment for the use of illicit drugs than adolescents living with two biological or adoptive parents.

For most substances, the highest risks of adolescent substance use, dependence, and need for treatment were found in families with a father and a stepmother and in families in which the adolescent was married and lived with a spouse. Higher risks were also found in families in which the adolescent lived with a father and no mother figure or lived with a mother and a nonrelative.

Additional information may be obtained from the National Clearinghouse for Alcohol and Drug Information at 800-729-6686 or from the Web site at www.health.org.

WHO Cross-National Survey Reports on Children's Health

The *Health of Youth—A Cross-National Survey*, by A. King, B. Wold, C. Tudor-Smith, and Y. Harel, gives the results of the fourth survey carried out since 1982 by the World Health Organization (WHO) on schoolchildren in 24 countries in Europe and Canada.

The Health Behavior in School-

Aged Children Study is a collaborative cross-national research study designed to increase understanding of the health-related attitudes and behaviors of young people.

The survey looks at the attitudes of children ages 11, 13, and 15 toward their experience of a wide range of health-related behaviors and lifestyle issues, including smoking, drinking, exercise, diet, health and illness, injuries, and school and social life.

Although children's use of tobacco and alcohol increases with age, they exercise less as they grow older. Many children's diets are unhealthy and worsen with age. Injuries from leisure activities are high, particularly among those who play sports.

More positively, a majority of students do not usually feel lonely, helpless, and "out of things"; they reported making friends easily, having at least two close friends, and talking easily to their mothers. Girls find their teenage years more difficult than boys, but they like school more than boys do.

The school setting appears to contribute to the perceptions students have about their health and happiness: those who are satisfied with school tend to show positive attitudes in several areas and reported less damaging behaviors.

The implications for health promotion policies and programs include

- Legislation on the sale of tobacco and alcohol to young people should be strengthened and more actively enforced.
- Health promotion programs against tobacco and alcohol should start early and should be extended to all pupils.
- School and leisure-related policy in areas such as sport and exercise, nutrition, and injuries should be further examined.
- The working environment offered by schools and the living conditions in boarding schools should be improved.
- Health promotion initiatives should combine health-enhanc-

ing behaviors and positive experiences for students and should simultaneously address schools, families, and leisure settings.

The report includes appendices on the school system in each country, the methodology used in the survey and the names of the principal investigators.

The 232-page report may be obtained for \$35.10 from the WHO Publications Center, 49 Sheridan Ave., Albany NY 12210.

Telemedicine Needs Better Evaluation

Telemedicine is hampered by a lack of reliable comparisons between its benefits and costs and other options, says a report by an Institute of Medicine (IOM) committee.

In a time of tight budgets, telemedicine should be subjected to the same rigorous review accorded to both new and established health care technologies to determine its effectiveness and cost-effectiveness, the committee said.

Researchers and clinicians have tried for more than three decades to bring health care to patients in remote areas—from tropical islands to Arctic regions—through the innovative use of information and communication technologies.

Recently, changes in the health care system and mounting financial pressures have fueled an increasing interest in telemedicine, which can be used in a variety of ways in patient care, education, research, administration, and public health. These applications range from ordinary 911 emergency calls to telesurgery with the use of robotic instruments at a distant site.

Uses such as interactive video for psychiatric consultations and home monitoring of patients have attracted attention and raised questions about the codes of conduct that should govern these procedures.

The committee report says a clear business plan is needed to assess

whether a program can be sustained beyond the test stage.

Evaluators should rely on the use of sensitivity analyses, an approach that asks "what if" questions to explore how projected results may vary depending on the assumptions made about costs, technical reliability, and user demand.

The committee recommended research that systematically compares telemedicine to its alternatives with regard to factors such as the clinical process of caregiving; the patient's status or health outcome; access to care; costs for patients, payers, providers, and society; and the satisfaction of patients and clinicians.

Although most initial attempts at telemedicine were limited by the expense and unwieldy nature of the technology, lower costs and the evolving national information infrastructure are making these technologies more commonplace and more easily used.

Obstacles remain, however. In addition to limited research, telemedicine suffers from a lack of hardware and software standards and is hindered by technology that is not always well suited to the health care environment. It remains difficult to configure systems in which all of the components work smoothly together and do not require extensive adaptation and systems that easily accommodate replacement or upgraded parts.

Because of telemedicine's potential impact on staffing levels and responsibilities, many clinicians may see it as an economic threat, the report says. It also notes that there are unresolved issues about the confidentiality and privacy of medical records that are transmitted electronically.

Other legal issues abound, including appropriate minimum standards for practice, medical licensure when patients and clinicians are in different states, professional liability concerns, and regulation of hardware and software.

To date, the Health Care Financing Administration has approved payment for very few applications of telemedicine. One exception is teleradiology, which has grown more quickly than other applications partly because it is reimbursed by Medicare and other payers.

The IOM report was funded by the National Library of Medicine and the Health Care Financing Administration, both of the Department of Health and Human Services. IOM provides policy advice to the health care community under a congressional charter granted to the National Academy of Sciences.

Telemedicine: A Guide to Assessing Telecommunications in Health Care is available for \$39.95 (prepaid) plus shipping charges of \$4 for the first copy and 50 cents for each additional copy from the National Academy Press, 2101 Constitution Ave. NW, Washington DC 20418; tel. 202-334-3313 or 800-624-6242. The document also is available on the Web at www2.nas.edu/whatsnew/.

CIA Recruited to Help in Breast Cancer War

The Department of Health and Human Services (HHS), in a unique collaboration with the Central Intelligence Agency (CIA), has awarded nearly \$2 million to the University of Pennsylvania to conduct a series of clinical trials of imaging technology to improve the early detection of breast cancer.

Over the last two years, the HHS Office on Women's Health has been exploring how national investments in defense, space, and intelligence technologies can be used to improve breast cancer detection techniques.

Research results from this initiative indicated there was a strong potential for adapting the high-tech imaging capabilities of the CIA and the Department of Defense—estimated to be some 10 years ahead of medical imaging—to improve the early detection and diagnosis of breast cancer.

This technology was used originally by the intelligence community for missile guidance and target recognition.

Clinical trials will test how effectively these new imaging procedures will work on breast cancer patients. The intention then is to have the new technologies available to consumers as soon as possible.

FDA, NIH Ease Rules on Experiments in Emergencies

The Food and Drug Administration (FDA) and the National Institutes of Health (NIH) have announced measures designed to protect people who may benefit from experimental treatments in life-threatening emergencies. [See related *Viewpoints* on human subjects research in this issue.]

FDA issued final rules to make it easier for promising experimental drugs and medical devices to be used for people who are in life-threatening situations and unable to give informed consent for their use.

As a companion document, NIH has published an *Emergency Research Consent Waiver* applicable to all agencies of the Department of Health and Human Services (HHS).

These policies establish narrow limits for allowing research without informed consent in certain studies of emergency medical procedures and harmonize these standards throughout the Department.

Under the new proposed conditions, patients could be enrolled in clinical trials without their consent provided that an independent physician and an institutional review board of experts and laypersons agree that (a) the clinical trial addresses a life-threatening situation and other available treatments are unproven or unsatisfactory, (b) the research practicably cannot be carried out otherwise, and (c) it is not feasible to obtain informed consent from the patient or the patient's legal representative.

In addition, the risks and benefits of the experimental procedure must be reasonably commensurate with those associated with the patient's medical condition and standard therapy.

FDA's final rule and the HHS Waiver Notice were published in the *Federal Register* on October 2, 1996. The regulations became effective November 2, 1996.

Better Records Needed for Gulf Veterans' Health Research

Studies on the health of soldiers who served in the Persian Gulf War are hampered by a system of medical record-keeping that is poorly suited for research on veterans' ailments, according to an Institute of Medicine (IOM) committee.

The committee calls for development of a uniform electronic medical record system and other improvements to help the Department of Defense (DOD), the armed services, and the Department of Veterans Affairs (VA) investigate the health complaints of those who served in the war.

The congressionally requested report says that although DOD and the VA have improved their research programs over the past two years, more is needed to ensure a full investigation and to prepare for health questions that will arise from future military conflicts.

The committee recommended completion of several important datasets, including one on environmental exposures during the war—as well as prompt submission of research for publication in peer-reviewed journals. The capability of the armed forces to conduct medical and population-based research needs to be strengthened and all projects selected for funding should be evaluated first



by a team of scientists, the report says.

"Six years after almost 700,000 American troops were sent to the Gulf, major questions remain about whether some of their health problems resulted from their military service," said committee chair John Bailar of the Department of Health Studies, University of Chicago. "The recent confirmation that at least some American troops were exposed to chemical weapons heightens our obligation to soldiers and their families to provide investigators with an atmosphere most conducive to proper research."

The IOM committee is one of several organizations directed by Congress and the White House to evaluate the health of Persian Gulf veterans. The committee's three-part charge from Congress was (a) to assess the effectiveness of DOD and the VA in collecting and maintaining information on the health consequences of Persian Gulf service; (b) to make recommendations on ways to improve the information; and (c) to advise on the scientific bases and possible nature of a future epidemiologic

study or studies of health effects.

The committee said that there is a strong likelihood that no single hypothesis could account for all of the abnormalities reported by veterans regardless of whether their illnesses are linked to service in the war.

Recent Defense Department confirmation that as many as 15,000 U.S. troops may have been exposed to chemical weapons during the war came too late for full consideration by the committee. This disclosure "continue[s] to raise questions about the completeness of exposure information provided by DOD to date," Bailar says in the preface of the report. "We encourage disclosure of all information that may inform the public understanding about the health effects of Persian Gulf service."

To help improve the flow of information among researchers and the public and to ensure at least minimal scientific quality, the committee recommended that all reports funded by DOD and the VA be published in open, peer-reviewed journals. Presently, while many reports are available to researchers who know

they exist and ask for them, they are not generally indexed and accessible where they can be located and evaluated by independent researchers.

The IOM report recommends that Congress and the Federal agencies require that all federally funded research related to unexplained illnesses or other health matters be announced generally and be open to the scientific community. These proposals should be reviewed by qualified experts, and funding decisions should be made on the basis of their recommendations.

Although recent reports have focused primarily on possible exposures to chemical weapons in the war, there remain other important research questions related to the health of Gulf veterans. The committee recommended rapid completion of several large studies currently underway and said that although there is basis for several epidemiologic studies to answer many remaining questions, an additional comprehensive nationwide study would be of limited scientific value at this time.

The report recommends research in the following areas:

- excess mortality from unintentional injury among veterans;
- the high incidence of psychiatric disorders among those who served—an occurrence common to every major military engagement since the Civil War—to identify factors that may indicate increased risk for stress-related psychiatric disorders among personnel;
- possible differences between the experiences of reserves, National Guard troops, and regular troops; and
- health consequences of assigning men and women to serve together in combat.

The committee also recommended

that some federally funded studies be continued for up to 30 years to compare the health of those who saw action during the Persian Gulf War with veterans assigned elsewhere.

Copies of Health Consequences of Service during the Persian Gulf War: Recommendations for Research and Information Systems are available for \$33 prepaid plus shipping charges of \$4 for the first copy and 50 cents for each additional copy from the National Academy Press, 2101 Constitution Ave. NW, Washington DC 20418; tel. 202-334-3313 or 800-624-6242.

IOM Publishes Workshop Findings on Child Care

The Institute of Medicine (IOM) and the National Research Council held five workshops between 1991 and 1994 on maternal and child health care in a time of change.

Now offered is a volume, *Paying Attention to Children in a Changing Health Care System*, that reprints the summaries of those workshops, touching on the following issues:

- Including children and pregnant women in health care reform;
- Benefits and systems of care for maternal and child health under health care reform;
- Protecting and improving the quality of care for children under health care reform;
- Strategies for assuring the provision of quality services through managed care delivery systems to children with special health care needs.

America's health care system is being reshaped by a variety of market-driven changes at the same time that states are emerging as the major governmental influence on health care policy, according to IOM.

Market forces have led to increasing pressures for cost containment; changes in the organization and

financing of Medicaid and other publicly funded health care; consolidation of health care delivery plans and insurers; and new divisions of responsibility among health care professionals, public health agencies, and other organizations. Amid these changes, the health and well-being of children can slip from view, the Institute claimed.

Copies of the volume may be purchased from the National Academy Press, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 800-624-6242 or 202-334-3313 in the Washington metropolitan area, and at www.nap.edu/bookstore.

Mortality of Participants in Nuclear Tests Similar to Other Veterans

Before the Nuclear Test Ban Treaty outlawed above-ground testing in 1963, the United States conducted 235 nuclear detonations that potentially exposed at least 210,000 military personnel to radiation. The first of these tests occurred in July and August 1946 at Bikini Atoll in the Marshall Islands and involved approximately 40,000 military personnel, mostly from the Navy.

A study by the Institute of Medicine (IOM) reveals that Navy personnel who served in the Bikini tests have died at a 4.6% higher rate than a comparable group of sailors who were not involved in the tests. But radiation does not appear to be the cause, says the study, which is the first extensive review of death rates among this group of servicemen. The study was completed by researchers at the Medical Follow-up Agency of IOM.

Drawing information from death certificates and other records, the agency examined only mortality, not the incidence of diseases. The agency sorted causes of death into more than 40 different categories but focused special attention on three groupings: all causes of death, all cancers, and leukemia.

According to current understand-

ing, if radiation exposure were causing higher mortality, death rates in the latter two categories should be elevated. But that was not found.

The report says that even those Bikini participants believed to have been exposed to the highest radiation doses because of their roles in the tests have not suffered from an unusually high incidence of cancer or leukemia. In fact, deaths from cancers and leukemia, while slightly higher, were not statistically significant, and the increases in these diseases were lower than for many other specific causes of death.

NIH Panel Urges Exercise for All

All Americans should engage in regular physical activity at a level appropriate to their capacity, needs, and interest, a National Institutes of Health (NIH) Consensus Panel has concluded.

Children and adults alike should set a goal of accumulating at least 30 minutes of moderate-intensity physical activity on most, and preferably, all days of the week, the panel of 13 experts urged.

Most Americans, the panel said, have little or no physical activity in their daily lives, and accumulating evidence indicates that physical inactivity is a major risk factor for cardiovascular disease. Moderate levels of physical activity, however, confer significant health benefits, according to the experts.

Even those who currently meet these daily standards may derive additional health and fitness benefits by becoming more physically active or including more vigorous activity. For those with known cardiovascular disease, cardiac rehabilitation programs that combine physical activity with reduction in other risk factors should be more widely used, the panel declared.

The non-Federal, nonadvocate panel represented the fields of cardiology, psychology, exercise physiology,

nutrition, pediatrics, public health, and epidemiology. In addition, 27 experts in cardiology, psychology, epidemiology, exercise physiology, geriatrics, nutrition, pediatrics, public health, and sports medicine presented data to the panel and a conference audience of 600.

The panel, answering predefined questions, based its conclusions on the scientific evidence presented in open forum and the scientific literature. Scientific evidence was given precedence over clinical anecdotal experience. The panel composed a draft statement that was circulated to the experts and the audience for comment. The panel

resolved conflicting recommendations and revised the statement.

Over the past 25 years, the United States has experienced a steady decline in the age-adjusted death toll from cardiovascular disease, primarily in mortality caused by coronary heart disease and stroke. Despite this decline, coronary heart disease remains the leading cause of death and stroke the third leading cause of death. Lifestyle improvements by the American public and better control of the risk factors for heart disease and stroke have been major factors in this decline.

ELECTRONIC UPDATE

Guttmacher Institute Launches Web Site

A Web site featuring information about national and international reproductive health and policy has been launched by the Alan Guttmacher Institute.

The site offers policy analysis and news releases as well as search tools on sexual behavior, pregnancy and birth, prevention and contraception, abortion, youth, sexually transmitted diseases, and law and public policy.

The site may be accessed at www.agi-usa.org.

Clinical Trial Information Available to Lay Public

A project sponsored by the National Cancer Institute and patient advocate groups provides easily understandable information

about ongoing cancer trials via the World Wide Web.

Summaries of 150 or more breast cancer trials were made available on line in the fall of 1996 through the home page of the National Alliance of Breast Cancer Organizations at www.nabco.org.

Links from that page lead to the NCI clinical trials page at www.nih.gov/health/ or URL [gopher//gopher.nih.gov:70/11/clin/cancernet](http://gopher.nih.gov:70/11/clin/cancernet).

Future sites will offer summaries of clinical trials of treatments for brain tumors and prostate cancer.

State Laws on Internet

The full text of state statutes, legislation, constitution, and session laws may be found on the Internet at "Full-Text State Statutes and Legislation on the Internet," located at www.prairienet.org/~scruffy/f.htm.